

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.                           | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |  |
|---|----------------|----------------------|---------------------|------------------|--|--|
| 10/624,527                                | 07/23/2003     | Kouetsu Hibino       | 10517/177           | 6668             |  |  |
| 23838 7                                   | 590 02/15/2006 |                      | EXAM                | INER             |  |  |
| KENYON & KENYON LLP<br>1500 K STREET N.W. |                |                      | RHEE,               | RHEE, JANE J     |  |  |
| SUITE 700                                 | 31 14.47.      | ART UNIT             | PAPER NUMBER        |                  |  |  |
| WASHINGTO                                 | N, DC 20005    | 1745                 |                     |                  |  |  |

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   | Application   | No.   | Applicant(s)   |              |  |  |  |
|---|---|---|---|--|--------------|--|--|--|
| Office Action Summary   |   | 10/624,527  | •   | HIBINO ET AL.  |              |  |  |  |
|   |   | Examiner  |   | Art Unit   |              |  |  |  |
|   |   | Jane Rhee   |   | 1745   |              |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |   |   |  |              |  |  |  |
| 1   |   |   | EVOIDE A MONTH  | (O) OD TUUDTY (2   | 0) DAVC      |  |  |  |
| A SHORTENED STATUTORY PERION WHICHEVER IS LONGER, FROM THE Extensions of time may be available under the provafter SIX (6) MONTHS from the mailing date of this If NO period for reply is specified above, the maxime Failure to reply within the set or extended period for Any reply received by the Office later than three may be a served patent term adjustment. See 37 CFR 1.704 | HE MAILING DA visions of 37 CFR 1.130 s communication. num statutory period with reply will, by statute, conths after the mailing of the status of the mailing of the status. | TE OF THI<br>6(a). In no ever<br>ill apply and will<br>cause the applic | S COMMUNICATION t, however, may a reply be tine expire SIX (6) MONTHS from ation to become ABANDONE | N. nely filed the mailing date of this candidate of this candidate. D (35 U.S.C. § 133). |              |  |  |  |
| Status  |   |   |   |  |              |  |  |  |
| 1) Responsive to communication (s   | s) filed on <u>12/2/2</u>   | <u>2005</u> .   |   |  |              |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> .   |   |   |   |  |              |  |  |  |
| · · · · · · · · · · · · · · · · · · ·   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |   |  |              |  |  |  |
| closed in accordance with the p   | ractice under Ex  | x parte Qua   | yle, 1935 C.D. 11, 4  | 53 O.G. 213.   |              |  |  |  |
| Disposition of Claims   |   |   |   |  |              |  |  |  |
| 4)⊠ Claim(s) <u>1-11</u> is/are pending in  | the application.  |   |   |  |              |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |   |   |  |              |  |  |  |
| 5) Claim(s) is/are allowed.   | -   |   |   |  |              |  |  |  |
| 6)⊠ Claim(s) <u>1-11</u> is/are rejected.   |   |   |   |  |              |  |  |  |
| 7) Claim(s) is/are objected   | to.   |   |   |  |              |  |  |  |
| 8) Claim(s) are subject to re   | estriction and/or   | election re   | quirement.  |  |              |  |  |  |
| Application Papers  |   |   |   |  |              |  |  |  |
| 9) The specification is objected to t   | ov the Examiner   | •   |   |  |              |  |  |  |
| 10)☐ The drawing(s) filed on is   | =   |   | objected to by the  | Examiner.  |              |  |  |  |
| Applicant may not request that any  |   |   | -   |  |              |  |  |  |
| Replacement drawing sheet(s) incl   |   |   | •   |  | FR 1.121(d). |  |  |  |
| 11) The oath or declaration is object   | ted to by the Exa   | aminer. Not   | e the attached Office   | Action or form P7  | ГО-152.      |  |  |  |
| Priority under 35 U.S.C. § 119  |   |   |   |  |              |  |  |  |
| 12) Acknowledgment is made of a c   | laim for foreign  | priority und  | er 35 U.S.C. § 119(a  | )-(d) or (f).  |              |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None  | of:   |   | <b>.</b>  | , , , , , ,  |              |  |  |  |
| 1. ☐ Certified copies of the pri  | ority documents   | have been   | received.   |  |              |  |  |  |
| 2. Certified copies of the pri  | ority documents   | have been   | received in Applicat  | ion No   |              |  |  |  |
| 3. Copies of the certified co   | pies of the priori  | ity documer   | nts have been receive   | ed in this National  | Stage        |  |  |  |
| application from the Inter  | national Bureau   | (PCT Rule   | 17.2(a)).   |  |              |  |  |  |
| * See the attached detailed Office  | action for a list o   | of the certifi  | ed copies not receive   | ∌d.  |              |  |  |  |
| !   |   |   |   |  |              |  |  |  |
|   |   |   |   |  |              |  |  |  |
| Attachment(s)   |   |   |   |  |              |  |  |  |
| 1) Notice of References Cited (PTO-892)   |   |   | 4) Interview Summary  |  |              |  |  |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Rev</li> <li>3) Information Disclosure Statement(s) (PTO-14</li> </ul>  |   |   | Paper No(s)/Mail D  Notice of Informal F  |  | O-152)       |  |  |  |
| Paper No(s)/Mail Date   |   |   | 6)  Other:  | •••  | ,            |  |  |  |

Application/Control Number: 10/624,527

Art Unit: 1745

#### **DETAILED ACTION**

## Rejections Withdrawn

- 1. The 35 U.S.C. 102(b) of claims 1,2,6-7,10 anticipated by Mizuno et al. has been withdrawn due to applicant's argument filed on 12/2/2005.
- 2. The objection to allowable subject matter of claims 3-5,8-9,11 has been withdrawn due to applicant's argument filed on 12/2/2005.

#### **New Rejections**

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-9,11 are rejected under 35 U.S.C. 102(b) as being anticipated by Collins et al. (6322915).

As to the preamble, a fuel cell purposed separator is not given any patentable weight. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Application/Control Number: 10/624,527 Page 3

Art Unit: 1745

As to claims 1 and 6 Collins et al. discloses a gas passage having a plurality of stages that are connected via a turnaround portion (figure 5 number 128), and a bypass that connects an upstream side stage of the gas passage to a downstream side stage of the gas passage and that cases a gas that flows in via a gas inlet of the bypass to flow out of a gas outlet (figure 5 number 124). Collins et al. teaches that the gas inlet and the gas outlet are located at a same side of the separator (figure 6 number 144 and 142). As to claims 2 and 7. Collins et al. discloses that the gas passage is defined by a sidewall of the separator and a rib or by two ribs (figure 5 number 136,138). As to claims 3,5, 8, and 11 the gas inlet to the flow field is located in a lower portion of the separator and the gas outlet from the flow field is located in the upper portion of the flow field (figure 5 number 130,132). As to claims 4 and 9, Collins et al. discloses that a bypass outlet of the bypass and a distal end of a downstream side partition rib overlap in a horizontal direction (figure 5 number 130). As to claim 10, Collins et al. teaches that the bypass is located at a side of the separator opposite from the gas inlet and the gas outlet (figure 2 numbers 50-52).

4. Claims 1,2,6-7,10 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizuno et al. (6387558).

As to claim 1 and 6, Mizuno et al. discloses a fuel cell separator comprising a gas passage having a plurality of stages that are connected via a turnaround portion (figure 13 number 640, 642 figure 5 number 60), and a bypass that connects an upstream side stage of the gas passage to a downstream side stage of the gas passage and that

Page 4

Application/Control Number: 10/624,527

Art Unit: 1745

cases a gas that flows in via a gas inlet of the bypass to flow out of a gas outlet (figure 13 numbers 690). As to claims 2 and 7, Mizuno et al. discloses that the gas passage is defined by a side wall of the separator and a rib or by two ribs (figure 13 number 640). Mizuno et al. teaches that the gas inlet and the gas outlet are located at a same side of the separator (figure 13 number 640 and 642). As to claim 10, Mizuno et al. teaches that the bypass is located at a side of the separator opposite from the gas inlet and the gas outlet (figure 13 numbers 640, 642).

#### Response to Arguments

5. Applicant's arguments filed have been fully considered but they are not persuasive.

In response to applicant's argument that Mizuno does not disclose a bypass that connects an upstream-side stage of a gas passage of a separator to a downstream stage of the gas passage, in figure 13 the bypass is 690 and the gas passage is 640 and 642 which is more clearly seen in figure 5. Therefore, Mizuno et al. teaches a bypass that connects an upstream side stage of a gas passage of a separator to a downstream stage of a gas passage as shown in figure 13.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane Rhee whose telephone number is 571-272-1499.

The examiner can normally be reached on M-F 9-6.

Application/Control Number: 10/624,527 Page 5

Art Unit: 1745

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jane Rhee

February 8,2006

PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER